

Amendments To The Claims

1. (Currently Amended) A vesicle comprising:

- a) an inner layer which comprises a phospholipid, ~~said inner layer being substantially free from calcium phosphate~~, and
- b) an outer layer which comprises calcium phosphate~~[[.]]~~, the outer layer being formed on the inner layer; and
- c) a pharmaceutically active compound contained within the vesicle.

2. (Original) A vesicle according to claim 1 wherein the phospholipid is selected from L- α -phosphatidylcholine and L- α -phosphatidylserine.

3. (Cancelled.)

4. (Cancelled.)

5. (Cancelled.)

6. (Previously Presented) A vesicle according to claim 1 wherein the outer layer further comprises ions selected from carbonate, hydrogen phosphate, chloride, fluoride or magnesium.

7. (Previously Presented) A vesicle according to claim 1 where in the thickness of the outer layer is from 5 to 50 nm.

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8. (Previously Presented) A vesicle according to claim 7 wherein the thickness of the outer layer is from 5 to 20 nm.

9. (Previously Presented) A vesicle according to claim 8 wherein the thickness of the outer layer is about 10 nm.

10. (Previously Presented) A vesicle according to claim 1 wherein the size of the vesicle is from 100 nm to 10 μ m.

11. (Previously Presented) A vesicle according to claim 10 wherein the size of the vesicle is at least 300 nm.

12. (Previously Presented) A vesicle according to claim 11 wherein the size of the vesicle is at least 1 μ m.

13. (Cancelled)

14. (Currently Amended) A vesicle according to claim 1 [[13]] wherein the pharmaceutically active compound assists the binding of the outer layer to bone, treats a specific bone disease or any diseased region adjacent to bone, or relieves pain.

15. (Previously Presented) A vesicle according to claim 14 wherein the pharmaceutically active compound is selected from parathyroid hormone, vitamin D derivatives, bisphosphanates, bone morphogenetic proteins, analgesics, ^{32}P or ^{89}Sr containing compounds, indomethacin, prostoglandins, interleuken 6 inhibitors and antibiotics.

16. (Currently Amended) A process for preparing a vesicle as claimed in claim 1, which process comprises

a) forming a vesicle in an aqueous mixture comprising a phospholipid and a pharmaceutically active compound, and

b) calcifying the outer surface of the vesicle by contacting said vesicle with an aqueous solution comprising calcium and phosphate ions.

17. (Cancelled.)

18. (Previously Presented) A process according to claim 16 wherein the aqueous mixture further comprises an alcohol.

19. (Original) A process according to claim 18 wherein the alcohol is selected from methanol, ethanol, propanol and butanol.

20. (Previously Presented) A process according to claim 18 wherein the concentration of alcohol is no more than 10% by volume of the aqueous mixture.

21. (Previously Presented) A process according to claim 16 wherein the ratio of calcium to phosphate ions in the aqueous solution is from 1:1 to 2:1.

22. (Original) A process according to claim 21 wherein the ratio of calcium to phosphate ions is 1.4:1 to 2:1.

23. (Original) A process according to claim 22 wherein the ratio of calcium to phosphate ions is about 1.5:1.

24. (Cancelled.)

25. (Cancelled.)

26. (Previously Presented) A solid substrate wherein regions of said substrate have attached thereto a layer comprising vesicles as claimed in claim 1 with other region or regions having no vesicles attached thereto.

27. (Previously Presented) A substrate according to claim 26 which comprises a surface layer comprising electrically conducting and non-conducting regions with a layer comprising vesicles on the conducting regions.

28. (Original) A substrate according to claim 27 wherein the non-conducting regions are from 10 μ m to 2 mm in size.

29. (Original) A substrate according to claim 28 wherein the non-conducting regions are about 150 μ m in size.

30. (Previously Presented) A process for preparing a substrate according to claim 26 which process comprises electrolytically depositing the coating comprising vesicles onto the conducting regions of the substrate.

31. (Cancelled.)

32. (Cancelled.)

33. (Cancelled.)

34. (Cancelled)

35. (Previously Presented) A method of treating a bone disorder in a patient which comprises implanting in the patient a substrate as claimed in claim 26.

36. (Previously Presented) A method of delivering pharmaceutically active compounds to a patient which comprises implanting in the patient a substrate as claimed in claim 26 comprising one or more pharmaceutically active compounds.

37. (New) A vesicle according to claim 1 wherein the pharmaceutically active compound is an antibiotic.

38. (New) A process according to claim 16 wherein the said aqueous solution is supersaturated.